

LOCALLY STORED STATIC  
CONFIGURATION TABLES

## Disk Adapter 110A

DA-Specific Target Number	Logical Device Volume# (DV#)	Mirror Number	Hot Spare Flag
0 (Drive 112)	DV0	M1	No
1 (Drive 112)	DV1	M1	No
2 (Drive 114)	DV2	M2	No
3 (Drive 114)	D/C	D/C	Yes
4 (Drive 116)	DV0	M2	No
5 (Drive 116)	DV1	M2	No
6 (Drive 118)	DV2	M1	No
7 (Drive 118)	D/C	D/C	Yes

**FIG. 2A**  
(Prior Art)

## Disk Adapter 110B

DA-Specific Target Number	Logical Device Volume# (DV#)	Mirror Number	Hot Spare Flag
0 (Drive 116)	DV0	M2	No
1 (Drive 116)	DV1	M2	No
2 (Drive 118)	DV2	M1	No
3 (Drive 118)	D/C	D/C	Yes
4 (Drive 112)	DV0	M1	No
5 (Drive 112)	DV1	M1	No
6 (Drive 114)	DV2	M2	No
7 (Drive 114)	D/C	D/C	Yes

**FIG. 2B**  
(Prior Art)

LOCALLY STORED  
STATIC CONFIGURATION TABLES

Logical Device Volume (DV#)	BCV Assignment Flag	Mirror Mask (# of Mirrors)
DV0	No	2-Way
DV1	No	2-Way
DV2	Yes	2-Way

**FIG. 3**

(Prior Art)

LOCALLY STORED DYNAMIC CONFIGURATION TABLE

Disk Adapter 110A

DA-Specific Target Number	Mirror Mask (# of Mirrors)	Mirror Number	DV#	DC/BCV Flags
0	2-Way (May be Increased)		DV0	
1	2-Way (May be Increased)		DV1	
2	2-Way (May be Increased)	Dynamically Assigned	Dynamically Assigned	Dynamically Assigned
3	Dynamically Assigned	Dynamically Assigned	Dynamically Assigned	Dynamically Assigned

FIG. 4A

(Prior Art)

Disk Adapter 110B

DA-Specific Target Number	Mirror Mask (# of Mirrors)	Mirror Number	DV#	DC/BCV Flags
0	2-Way (May be Increased)		DV0	
1	2-Way (May be Increased)		DV1	
2	2-Way (May be Increased)	Dynamically Assigned	Dynamically Assigned	Dynamically Assigned
3	Dynamically Assigned	Dynamically Assigned	Dynamically Assigned	Dynamically Assigned

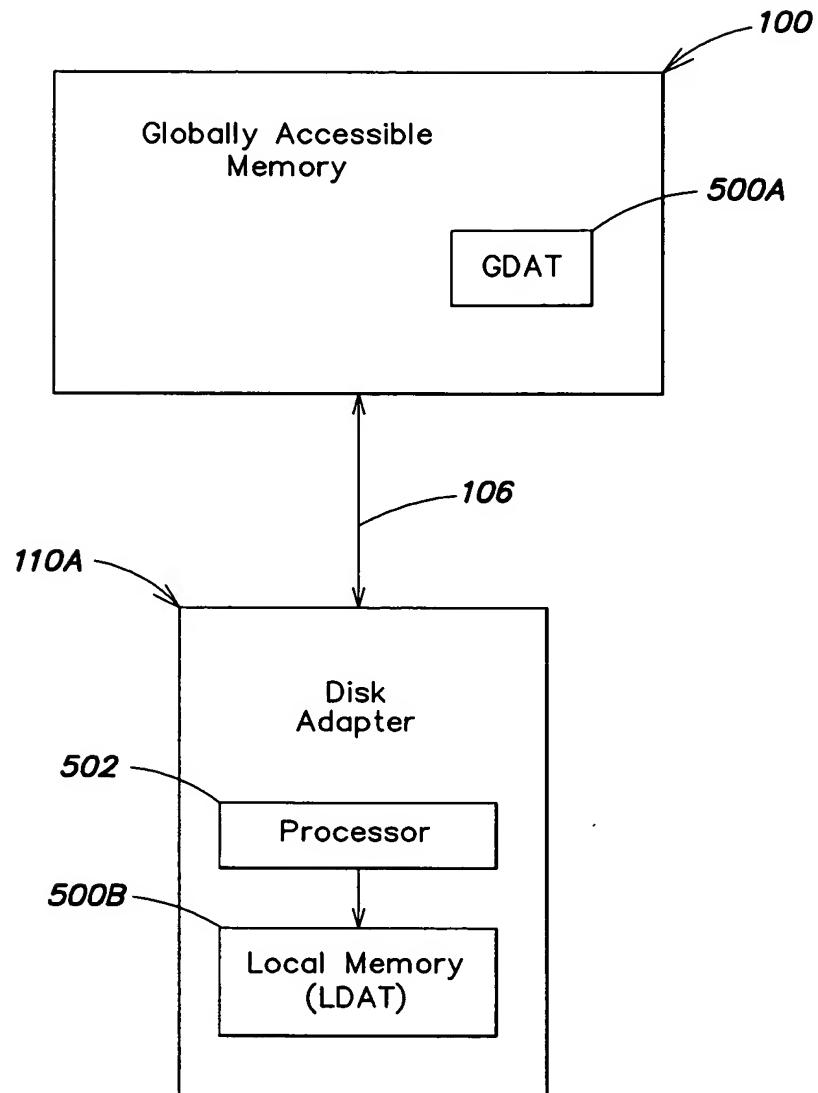
FIG. 4B

(Prior Art)

GLOBALLY ACCESSIBLE  
DYNAMIC CONFIGURATION TABLE

Disk Adapter # (DA#)	DA-Specific Target Number	Mirror Mask (# of Mirrors)	Mirror Number	Logical Device Volume# (DV#)	DC/BCV Flags
DA 110A	0	2-Way (May be Increased)		DV0	
DA 110A	1	2-Way (May be Increased)		DV1	
DA 110A	2	2-Way (May be Increased)	Dynamically Assigned	Dynamically Assigned	Dynamically Assigned
DA 110A	3	Dynamically Assigned	Dynamically Assigned	Dynamically Assigned	Dynamically Assigned
DA 110B	0	2-Way (May be Increased)		DV0	
DA 110B	1	2-Way (May be Increased)		DV1	
DA 110B	2	2-Way (May be Increased)	Dynamically Assigned	Dynamically Assigned	Dynamically Assigned
DA 110B	3	Dynamically Assigned	Dynamically Assigned	Dynamically Assigned	Dynamically Assigned

**FIG. 5**  
(Prior Art)



**FIG. 6**

GLOBAL DYNAMIC ASSIGNMENT TABLE (GDAT)  
(Stored Locally With Each Disk Adapter and in Globally Accessible Memory)

Byte 0	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7
DC/BCV Flags	Hot Spare State/Director Number	Mirror/Mask Number	DC/BCV Flags	Primary/Secondary DC/BCV DV#		Hot Spare Target Number	

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FIG. 7

GLOBAL DYNAMIC ASSIGNMENT TABLE (GDAT)  
(With Hot Spare Assignments)

Logical Device Volume# (DV#)	Hot Spare State/Director Number (Byte 1)			Hot Spare Target Number (Bytes 6 & 7)
	Hot Spare Mirror Number	Hot Spare Active Flag	Hot Spare Director Number	
DV0	D/C	No	D/C	D/C
DV1	M3	Yes	DA 110A	3
DV2	M3	Yes	DA 110B	3

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FIG. 8

GLOBAL DYNAMIC ASSIGNMENT TABLE (GDAT)  
(With DC/BCV Devices in Use)

Primary (Non-BC/BCV) DV# Entries

Logical Data Volume# (DV#)	DC/BCV Connection Established (Byte 0)	Mirror Mask Number (Byte 2)			Secondary DC/BCV DV# (Bytes 4 & 5)
		Not Active Mirror Mask	Prim. Mirror Number	Sec. Mirror Number	
DV0	No	D/C	D/C	D/C	D/C
DV1	Yes	D/C	D/C	D/C	DV2

FIG. 9A

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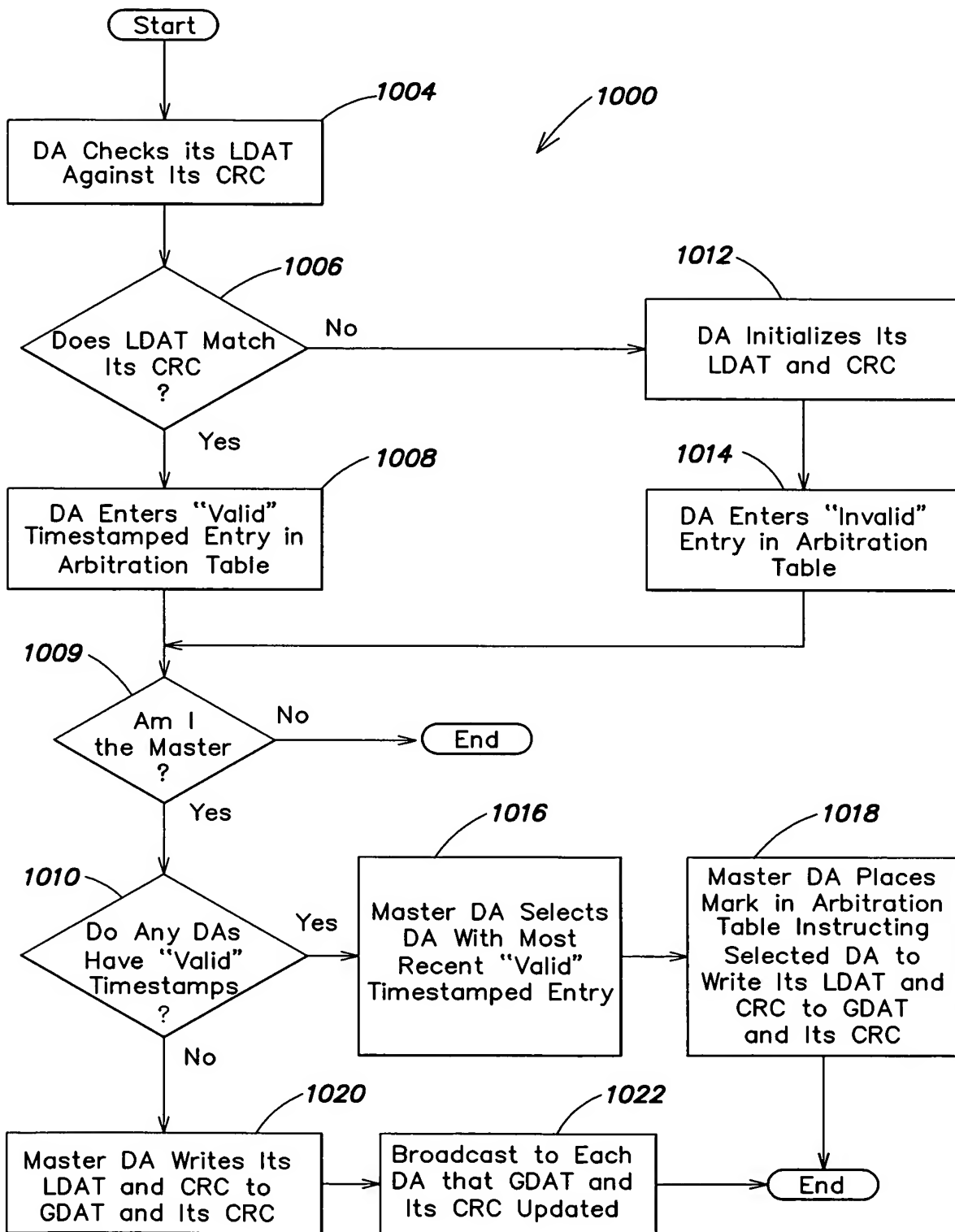
Secondary (BC/BCV) DV# Entries

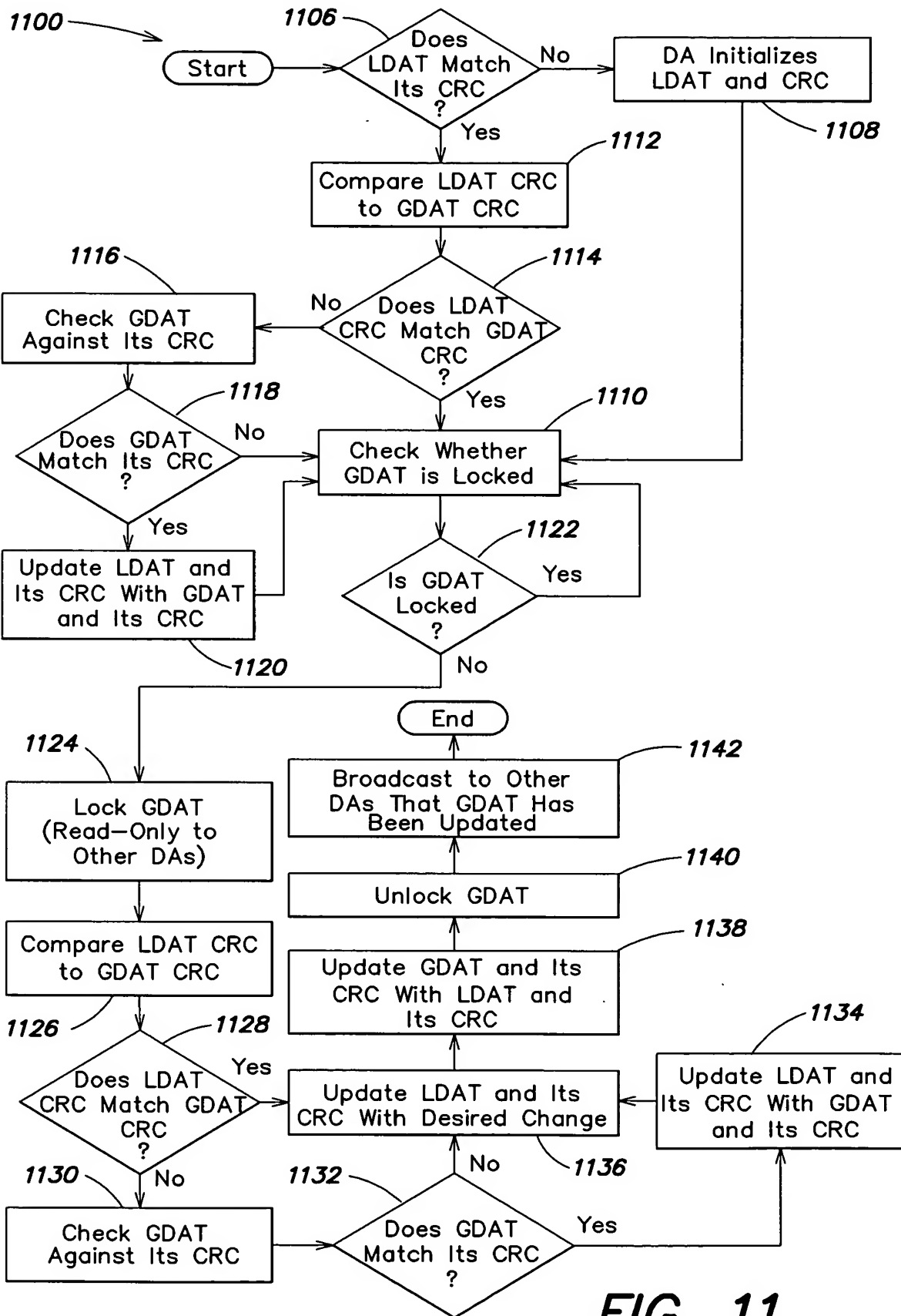
Logical Data Volume# (DV#)	DC/BCV Connection Established (Byte 0)	Mirror Mask Number (Byte 2)			Primary DC/BCV DV# (Bytes 4 & 5)
		Not Active Mirror Mask	Prim. Mirror Number	Sec. Mirror Number	
DV2	Yes	M2	M3	M1	DV1

FIG. 9B

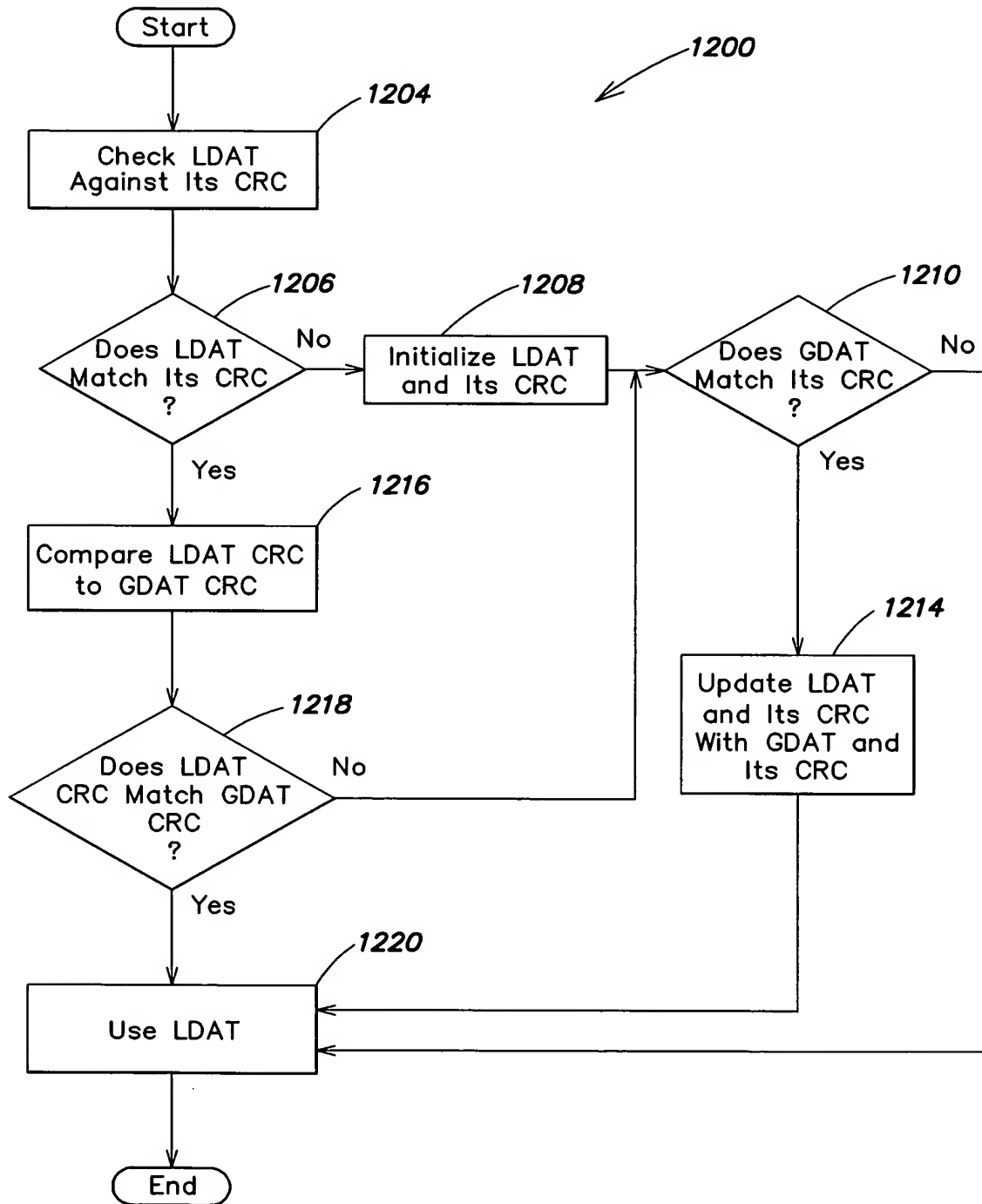
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**FIG. 10**



**FIG. 11**

**FIG. 12**